

PATENTDocket No. 4303-4003US1

C1 a third loop containing section joined to the first loop containing section at a second junction and joined to the second loop containing section at a third junction such that a plurality of first loop containing sections are joined together through the second and third loop containing sections without connection directly between the first loop containing sections.

C2 (Twice Amended) 9. A stent according to claims 1 or 5, wherein the second and first junction are circumferentially aligned.

C3 (Twice Amended) 21. A stent for widening a vessel in the human body comprising:

a plurality of first meander patterns;

a plurality of second meander patterns intertwined with the first meander patterns to form triangular cells, each of said triangular cells having three loop containing sections, such that the first meander patterns are joined together through the second meander patterns [without connection directly between the first meander patterns] and the second meander pattern disposed between the first meander pattern.

C4 (Amended) 27. A stent according to claim 24, wherein the first loop containing section has wider struts than the second and third loop containing sections.

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C4 (Amended) 28. A stent according to claim 24, wherein the first meander pattern has two loops per cell.

(Amended) 29. A stent according to claim 24, wherein the second meander pattern has four loops per cell.

(Amended) 30. A stent according to claim 24 wherein the first and second meander patterns have center lines that are substantially orthogonal.

C5 (Twice Amended) 32. A stent according to claim 24, wherein the second and third loop containing sections each have at least two loops.

6-28-02  
C6 (Amended) 41. A multicellular stent according to claim 40, wherein members forming the first loop containing section have wider struts than members forming the second and third loop containing sections.

(Amended) 42. A multicellular stent according to claim 41, wherein the first loop containing section forms at least two loops facing toward the interior of the cell.

(Amended) 43. A multicellular stent according to claim 42, wherein the second loop containing section forms at least one loop facing toward the interior of the cell

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C<sup>7</sup>  
(Amended) 49. A multicellular stent according to claim 48, wherein each triangular cell of the stent encompasses about the same area.

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C<sup>8</sup>  
(Twice Amended) 67. An expandable stent comprising a plurality of enclosed flexible spaces, each of the plurality of enclosed flexible spaces delineated by a plurality of triangular cells, each triangular cell including:

- a) a first member having a first end and a second end;
- b) a second member having a first end and a second end;
- c) a third member having a first end and a second end;
- d) a fourth member having a first end and a second end; the first end of the first member communicating with the first end of the second member, the second end of the second member communicating with the second end of the third member, and the first end of the third member communicating with the first end of the fourth member;
- e) the first member and the second member with the curved portion at their ends forming a first loop;
- f) the third member and the fourth member with the curved portion at their ends forming a second loop;
- g) a fifth member having a first end and a second end;
- h) a sixth member having a first end and a second end;
- i) a seventh member having a first end and a second end;
- j) an eighth member having a first end and a second end;
- k) a ninth member having a first end and a second end; and

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CS  
l) a tenth member having a first end and a second end, the first end of the fifth member coupled to the second end of the first member, the second end of the fifth member communicating with the second end of the sixth member, the first end of the sixth member communicating with the first end of the seventh member, the second end of the seventh member communicating with the second end of the eighth member, the first end of the eighth member communicating with the first end of the ninth member, the second end of the ninth member communicating with the second end of the tenth member, and the first end of the tenth member coupled to the second end of the fourth member;

m) the fifth member and the sixth member with the curved portion at their ends forming a third loop;

n) the seventh member and the eighth member with the curved portion at their ends forming a fourth loop; and

o) the ninth member and the tenth member with the curved portion at their ends forming a fifth loop, such that the first and the fourth members are joined together through the fifth, the sixth, the seventh, the eighth, the ninth and the tenth members without connection directly between first and fourth members.

CG  
(Twice Amended) 100. A stent according to claim 99, wherein, while flexing, loops in the second and third loop containing sections have maximal strain of the expanded stent within a blood vessel that is lower than the elastic limit of the material of the stent.

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C9  
(Twice Amended) 101. A stent according to claim 95, wherein the first loop containing sections are 180 degrees out of phase with adjacent and parallel first loop containing sections.

C10  
(Amended) 110. A stent according to claim 108, wherein each cell includes at least two loops of one of said plurality of first circumferential bands and at least three loops of one of said plurality of second circumferential bands.

S247  
C11  
(Amended) 112. A stent according to claim 108, wherein the first circumferential bands have loops with struts that are wider than struts in the loops in said second circumferential bands.

(Amended) 113. A stent according to claim 112, wherein the higher frequency loops in said second circumferential bands provide improved flexibility

(Amended) 114. A stent according to claim 113, wherein, while flexing, elements in the higher frequency loops have maximal strain that is lower than the elastic limit of the material of the stent.

C12  
(Amended) 116. A stent according to claim 108, wherein the first circumferential bands have loops forming two cycles per cell.

c12

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(Amended) 117. A stent according to claim 108, wherein the second circumferential bands have loops forming three cycles per cell.

Please add the following claims:

(New)120. A stent according to claim 6, wherein the stent is made of super elastic Nitinol.

§ 137  
(New)121. A stent according to claim 6, wherein the stent is made of a radiopaque material, and more preferably an alloy comprising Chromium and Cobalt.

C13  
(New) 122. A stent according to claims 21 or 22, wherein the second meander patterns are comprised of all even second meander patterns.

(New) 123. A multicellular stent according to claims 37, 38 or 44, wherein the stent is made of super elastic Nitinol.

§ 167  
(New) 124. A multicellular stent according to claims 37, 38, or 44, wherein the stent is made of a radiopaque material, and more preferably an alloy comprising Chromium and Cobalt.

(New)125. A stent according to claim 100, wherein the stent is exposed to repeated flexing of a vessel caused by the systolic cycle in a coronary artery.

(New) 126. A stent according to claim 95, wherein the stent is made of super elastic Nitinol.